REMARKS

Claims 1 and 3-10 are pending. Claims 1, 5, 6, 9 and 10 have been amended. No new matter has been introduced. Reexamination and reconsideration of the present application are respectfully requested.

In the December 12, 2007 Office Action, the Examiner rejected claims 1-10 under 35 U.S.C. § 102 (b) as being anticipated by Okamoto, U.S. Patent No. 5,559,298 (hereinafter Okamoto). Applicant respectfully traverses the rejections in view of the claims as amended.

Independent claim 1 recites:

A tone generator system which generates at least one musical tone in response to sounding instruction data relating to a channel by using a program number based on tone color changing instruction data designating a tone color of the channel which is stored in predetermined timing before the sounding instruction data, the tone color changing instruction data including a channel number indicative of the channel and the program number, and the sounding instruction data including the channel number, comprising:

a first waveform storage that stores *compressed waveform data, each of the stored compressed waveform data being readable based on the program number, the compressed waveform data being compressed in a compression method for compressing waveform data in units of a frame comprised of a plurality of samples encoded with a format such as MPEG-1 Audio Layer 3 (MP3), MPEG-2, Advanced Audio Coding (AAC), and Adaptive Transform Acoustic Coding (ATRAC);*

a second waveform storage;

a sequencer that sequentially receives and interprets a series of messages included in a musical composition file, supplies the tone color changing instruction data obtained by interpreting the series of messages, and then supplies the sounding instruction data obtained by interpreting the series of messages;

a decoder responsive to the tone color changing instruction data supplied from said sequencer, for reading out from said first waveform storage the compressed waveform data based on the program number included in the supplied tone color changing instruction data, for decoding the readout compressed waveform data into waveform data in a pulse code modulation format, and for storing the decoded waveform data in the pulse code modulation format into said second waveform storage, each of the stored decoded waveform data being readable based on the channel number; and

a tone generator section that is responsive to the sounding instruction data supplied from said sequencer, for reading out from said second waveform storage the waveform data in the pulse code modulation format, based on the channel number

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included in the supplied sounding instruction data, and for generating musical tones based on the readout waveform data in the pulse code modulation format.

The present invention is related to implementing automatic performance processing based on two types instruction data (sounding instruction data and tone color changing instruction data). In the present invention, compressed waveform data are decoded prior to musical tone-generating processing to prevent delay in generating a musical tone due to decoding the compressed waveform data.

As recited in independent claim 1, as amended, the present invention is directed to a tone generator system in which a series of messages in a musical composition (e.g., musical composition data) are interpreted using a sequencer, thereby automatically implementing performance processing based on the musical composition file. With regard to the automatic performance processing, the system is characterized in that in response to tone color changing instruction data supplied from the sequencer, the decoder decodes the compressed waveform data having been compressed in a compression method for compressing waveform data in units of frame comprised of a plurality of samples encoded with a format such as MP3, AAC, or ATRAC. As a result, the compressed waveform data is decoded in advance before the tone generator section starts musical tone-generating processing in response to sounding instruction data.

In particular, in the case of using a compression method such as MP3, AAC, or ATRAC that performs data compression in units of a frame comprised of a plurality of samples to thereby realize a high-compression rate, while taking much time for decoding the compressed waveform data, musical tone-generating processing based on compressed waveform data can be carried out without delay, using a decoder that decodes

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compression waveform data in response to tone color changing instruction data supplied in advance to the decoder before the tone generator section starts musical tone-generating processing in response to the sounding instruction data.

The Okamoto reference does not disclose, teach or suggest the tone generator system specified in independent claim 1, as amended. Specifically, unlike the tone generator system specified in independent claim 1, Okamoto does not teach "a first waveform storage that stores *compressed waveform data, each of the stored compressed waveform data being readable based on the program number, the compressed waveform data being compressed in a compression method for compressing waveform data in units of a frame comprised of a plurality of samples encoded with a format selected from the group consisting of MPEG-1 Audio Layer 3 (MP3), MPEG-2, Advanced Audio Coding (AAC), and Adaptive Transform Acoustic Coding (ATRAC)"* or "*a decoder responsive to the tone color changing instruction data supplied from said sequencer, for reading out from said first waveform storage the compressed waveform data based on the program number included in the supplied tone color changing instruction data, for decoding the readout compressed waveform data into waveform data in a pulse code modulation format, and for storing the decoded waveform data in the pulse code modulation format into said second waveform storage*, each of the stored decoded waveform data being readable based on the channel number."

Okamoto is related to implementing manual performance processing based on manual performance operation performed in a key board. Okamoto discloses a CPU 11 of the electronic musical instrument which fetches a key-ON or key-OFF signal from a keyboard 14, and acquires a key number and touch data for a key where an event has

occurred. Based on these data, the CPU 11 transmits a tone generation parameter read

from a program ROM 12 to a tone generation system 17, thereby producing a musical

tone. *(Okamoto, Col. 4, lines 7-16)*

However, Okamoto neither suggests nor discloses preventing delay in generating

a musical tone due to decoding. More specifically, the system specified in independent

claim 1, as amended is distinct from the disclosure of Okamoto because Okamoto

discloses an electronic musical instrument in which a musical tone is produced in

response to manual performance operation performed on the keyboard which is not the

same as "a first waveform storage that stores *compressed waveform data, each of the*

stored compressed waveform data being readable based on the program number, the

compressed waveform data being compressed in a compression method for

compressing waveform data in units of a frame comprised of a plurality of samples

encoded with a format such as MPEG-1 Audio Layer 3 (MP3), MPEG-2, Advanced

Audio Coding (AAC), and Adaptive Transform Acoustic Coding (ATRAC)" or *"a*

decoder responsive to the tone color changing instruction data supplied from said

sequencer, for reading out from said first waveform storage the compressed waveform

data based on the program number included in the supplied tone color changing

instruction data, for decoding the readout compressed waveform data into waveform

data in a pulse code modulation format, and for storing the decoded waveform data in

the pulse code modulation format into said second waveform storage, each of the stored

decoded waveform data being readable based on the channel number."

Furthermore, Applicant respectfully submits that at the time of filing this

application, it was difficult to attain, from the teachings of Okamoto, the advantages of

this invention that a musical tone can be generated without delay even when using a compression method such as MP3, AAC, or ATRAC that performs data compression in units of a frame comprised of a plurality of samples. Accordingly, Applicant respectfully submits that independent claim 1, distinguishes over Okamoto.

Independent claims 5 and 6 recite limitations similar to those in independent claim 1, as amended. Accordingly, Applicant respectfully submits that independent claims 5 and 6 distinguish over Okamoto for reasons similar to those set forth above with respect to independent claim 1, as amended.

Claims 3-4, 7-8, and 9-10 depend from independent claims 1, 5, and 6, respectively.. Accordingly, Applicant respectfully submits that claims 3-4, 7-8, and 9-10 distinguish over Okamoto for the same reasons set forth above with respect to independent claims 1, 5, and 6, respectively.

Applicant respectfully submits that the claims are in condition for allowance. If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (213) 488-7100 to discuss the steps necessary for placing the

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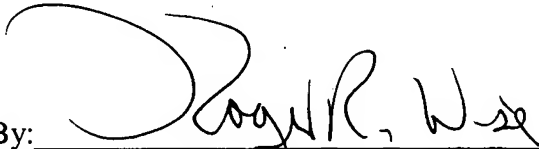/ / /

application in condition for allowance should the Examiner believe that such a telephone

conference call would advance prosecution of the application.

Respectfully submitted,

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Date: March 11, 2008   By:_____

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